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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Attorney Docket No. 16781/276/BEDL

In re patent application of
Daniel CAPUT et al.
Serial No. 07/920,519
Filed: July 28, 1992
For: URATE OXIDASE ACTIVITY PROTEIN, RECOMBINANT GENE CODING THEREFOR, EXPRESSION VECTOR, MICROORGANISMS AND TRANSFORMED CELLS

Allowed: May 31, 1994
Batch: B21
Group Art Unit: 1814
Examiner: D. Schmickel

SUBMISSION OF FORMAL DRAWINGS

The Honorable Commissioner of
Patents and Trademarks
Washington, D.C. 20231

Sir:

Applicants submit herewith fifteen (15) sheets of formal drawings for this case.

Respectfully submitted,

August 31, 1994
Date

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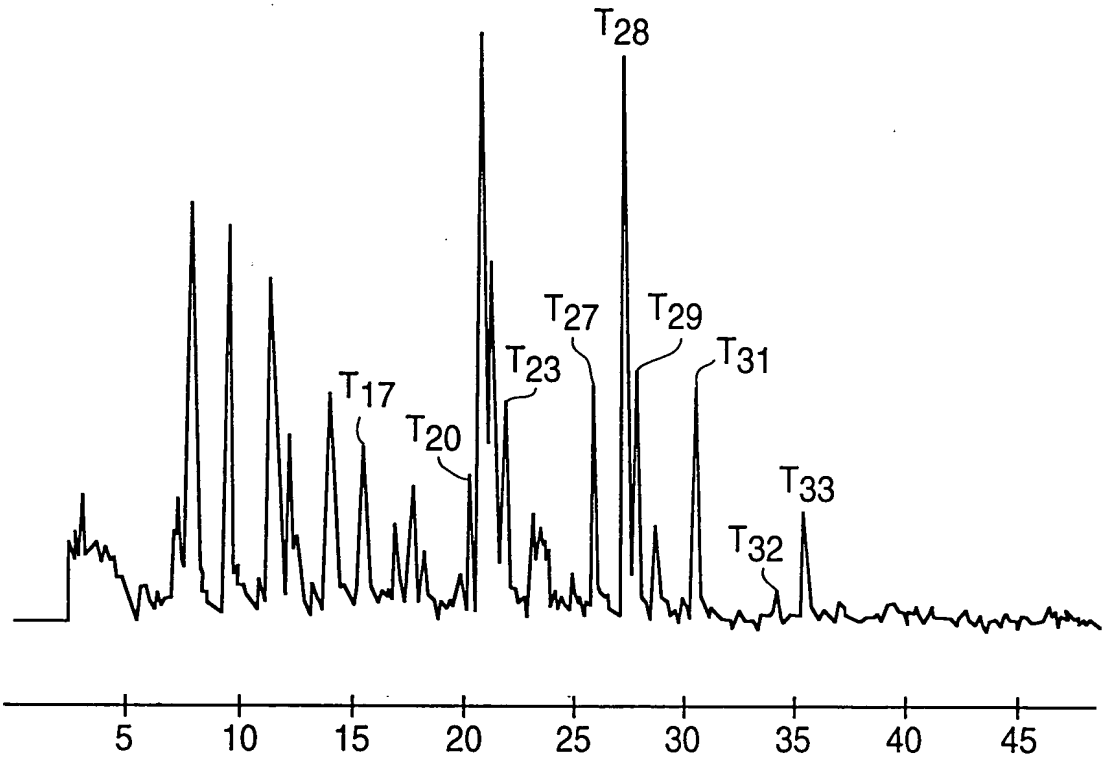
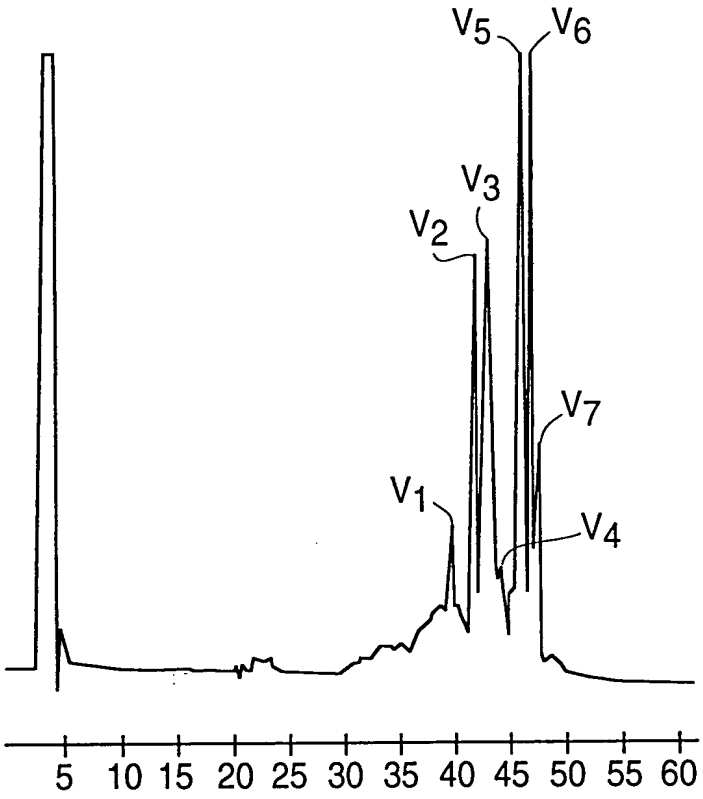
FIG. 1



ELUTION PROFILE BY MEASUREMENT OF THE OPTICAL DENSITY AT 218 nm OF THE PRODUCT OF TRYPTIC DIGESTION OF URATE OXIDASE

FIG. 2



ELUTION PROFILE BY MEASUREMENT OF THE OPTICAL DENSITY AT 218 nm OF THE PRODUCT OF DIGESTION OF URATE OXIDASE WITH PROTEASE V8

FIG. 3

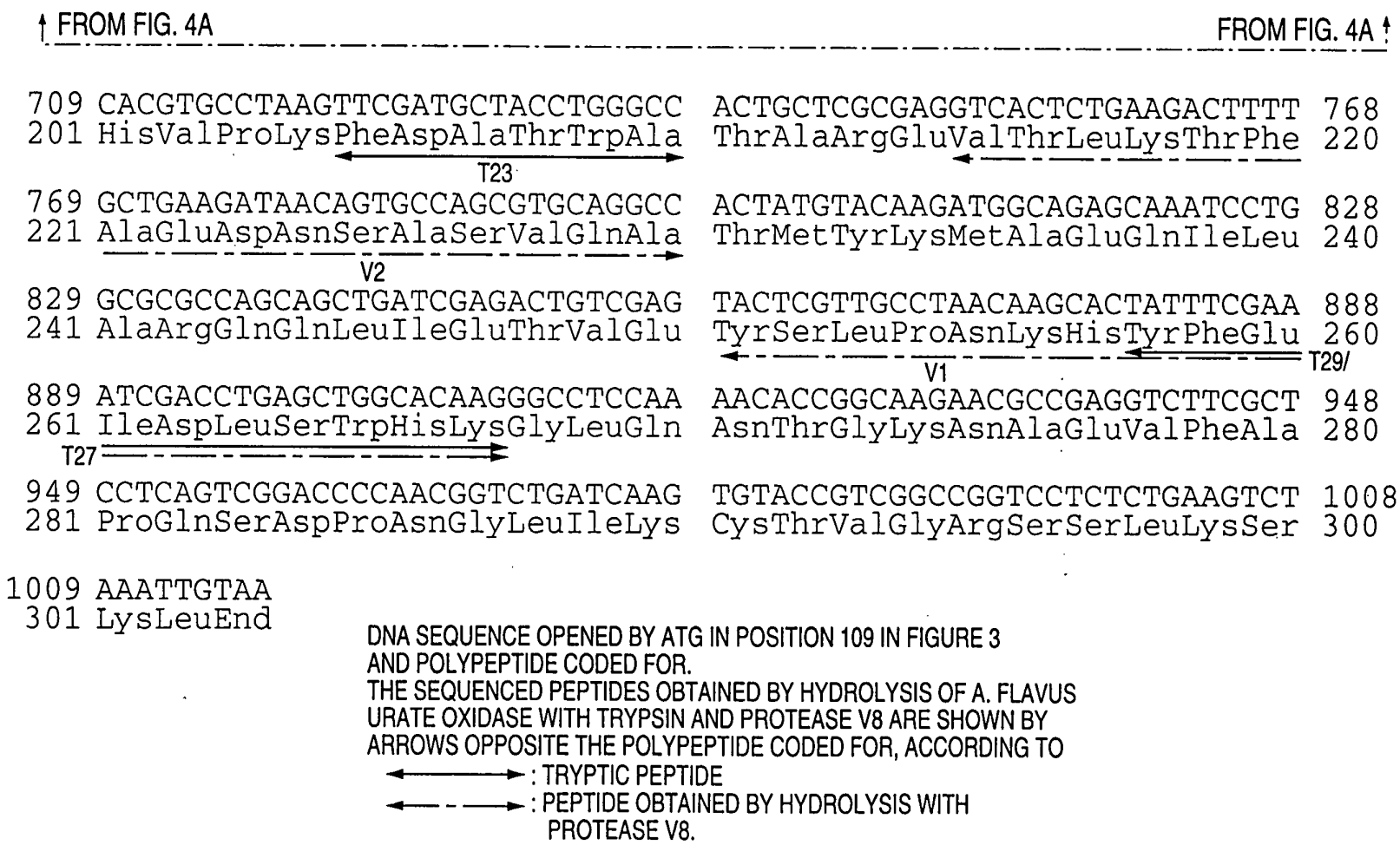
```
   1 AAACCCTCACTGCCTCTCTCATTCCTTCCG  GTGCCCCCGATCCTCAATCCAACTTGTACA 60
  61 TACTTCTCCCAACTCTCTGCTATATCCTTC  ATATTCCCATACTACAAGATGTCCGCAGTA 120
 121 AAAGCAGCCCGCTACGGCAAGGACAATGTC  CGCGTCTACAAGGTTCACAAGGACGAGAAG 180
 181 ACCGGTGTCCAGACGGTGTACGAGATGACC  GTCTGTGTGCTTCTGGAGGGTGAGATTGAG 240
 241 ACCTCTTACACCAAGGCCGACAACAGCGTC  ATTGTCGCAACCGACTCCATTAAGAACACC 300
     ↓
 301 ATTTACATCACCGCCAAGCAGAACCCCGTT  ACTCCTCCCGAGCTGTTCGGCTCCATCCTG 360
 361 GGCACACACTTCATTGAGAAGTACAACCAC  ATCCATGCCGCTCACGTCAACATTGTCTGC 420
 421 CACCGCTGGACCCGGATGGACATTGACGGC  AAGCCACACCCTCACTCCTTCATCCGCGAC 480
                                  A*
 481 AGCGAGGAGAAGCGGAATGTGCAGGTGGAC  GTGGTCGAGGGCAAGGGCATCGATATCAAG 540
 541 TCGTCTCTGTCCGGCCTGACCGTGCTGAAG  AGCACCAACTCGCAGTTCTGGGGCTTCCTG 600
 601 CGTGACGAGTACACCACAGTTAAGGAGACC  TGGGACCGTATCCTGAGCACCGACGTCGAT 660
 661 GCCACTTGGCAGTGGAAGAATTTCAGTGGA  CTCCAGGAGGTCCGCTCGCACGTGCCTAAG 720
 721 TTCGATGCTACCTGGGCCACTGCTCGCGAG  GTCACTCTGAAGACTTTTGCTGAAGATAAC 780
 781 AGTGCCAGCGTGCAGGCCACTATGTACAAG  ATGGCAGAGCAAATCCTGGCGCGCCAGCAG 840
 841 CTGATCGAGACTGTCGAGTACTCGTTGCCT  AACAAGCACTATTTCGAAATCGACCTGAGC 900
     G*
 901 TGGCACAAGGGCCTCCAAAACACCGGCAAG  AACGCCGAGGTCTTCGCTCCTCAGTCGGAC 960
 961 CCCAACGGTCTGATCAAGTGTACCGTCGGC  CGGTCCTCTCTGAAGTCTAAATTGTAAACC 1020
1021 AACATGATTCTCACGTTCCGGAGTTTCCAA  GGCAAACTGTATATAGTCTGGGATAGGGTA 1080
1081 TAGCATTCATTCACTTGTTTTTTACTTCCA  AAAAAAAAAAA...
```

NUCLEOTIDE SEQUENCE OF CLONE 9C AND OF PART OF CLONE 9A

: START OF CLONE 9A

FIG. 4A

FIG. 4B



DNA SEQUENCE OPENED BY ATG IN POSITION 109 IN FIGURE 3
AND POLYPEPTIDE CODED FOR.
THE SEQUENCED PEPTIDES OBTAINED BY HYDROLYSIS OF A. FLAVUS
URATE OXIDASE WITH TRYPSIN AND PROTEASE V8 ARE SHOWN BY
ARROWS OPPOSITE THE POLYPEPTIDE CODED FOR, ACCORDING TO

←→ : TRYPTIC PEPTIDE

←- -→ : PEPTIDE OBTAINED BY HYDROLYSIS WITH PROTEASE V8.

FIG.

FIG. 5

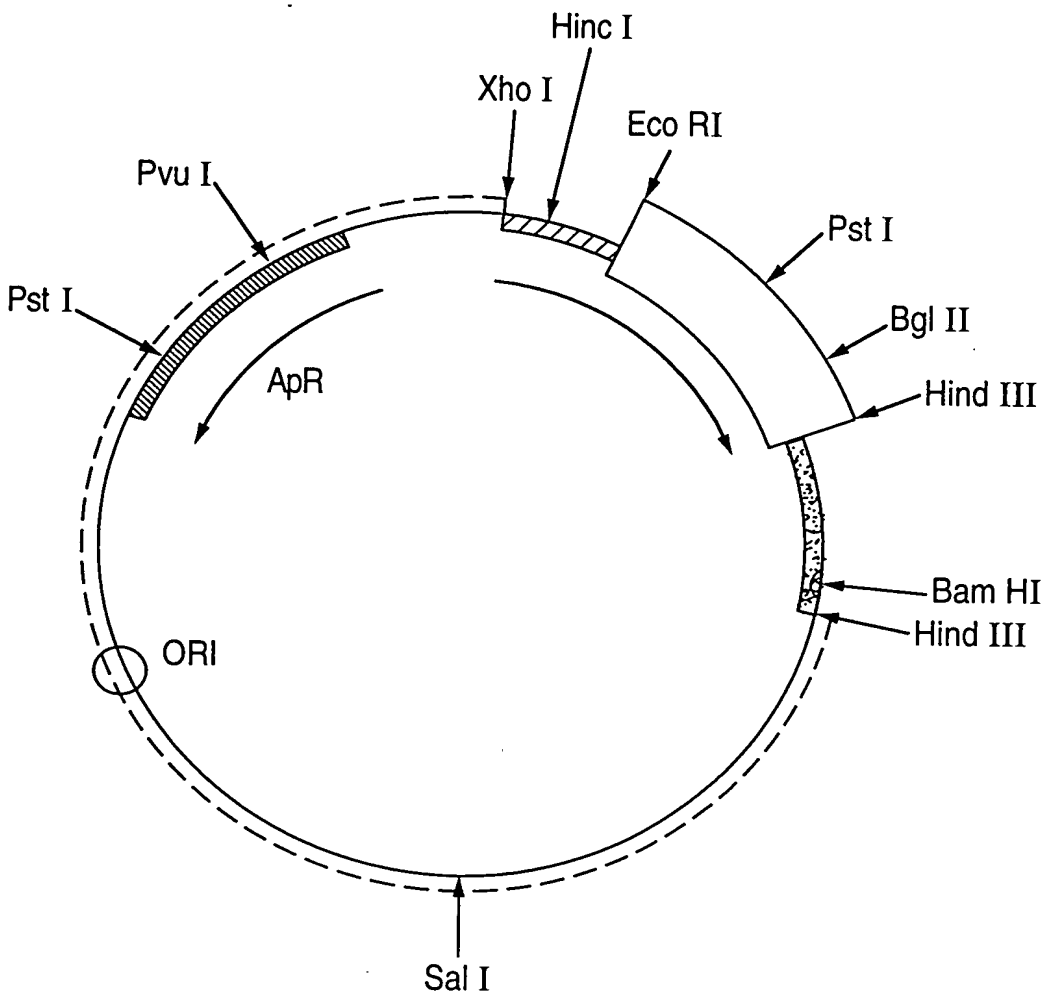

Hinc I
Xho I
Eco RI
Pvu I
Pst I
Pst I
Bgl II
ApR
Hind III
Bam HI
Hind III
ORI
Sal I

FIG. 6

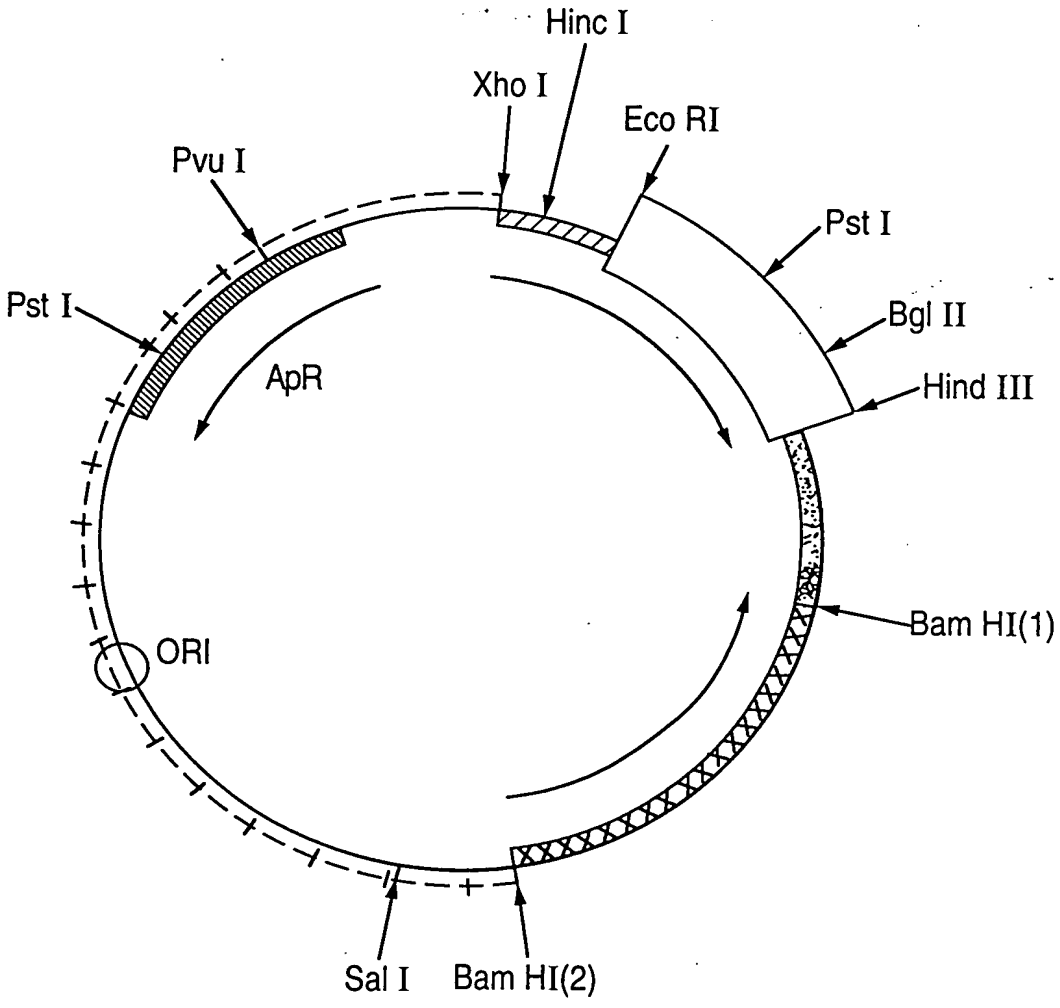


FIG. 7

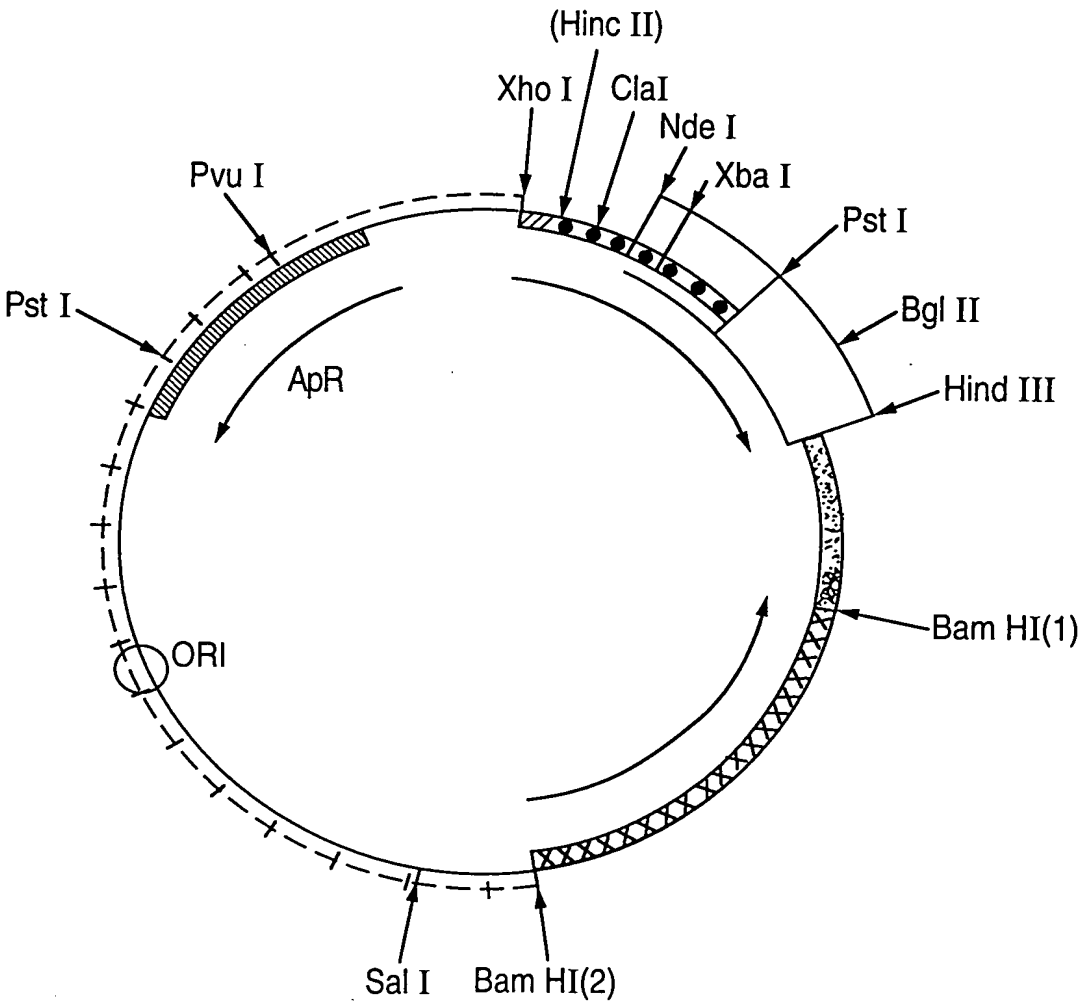


FIG. 8

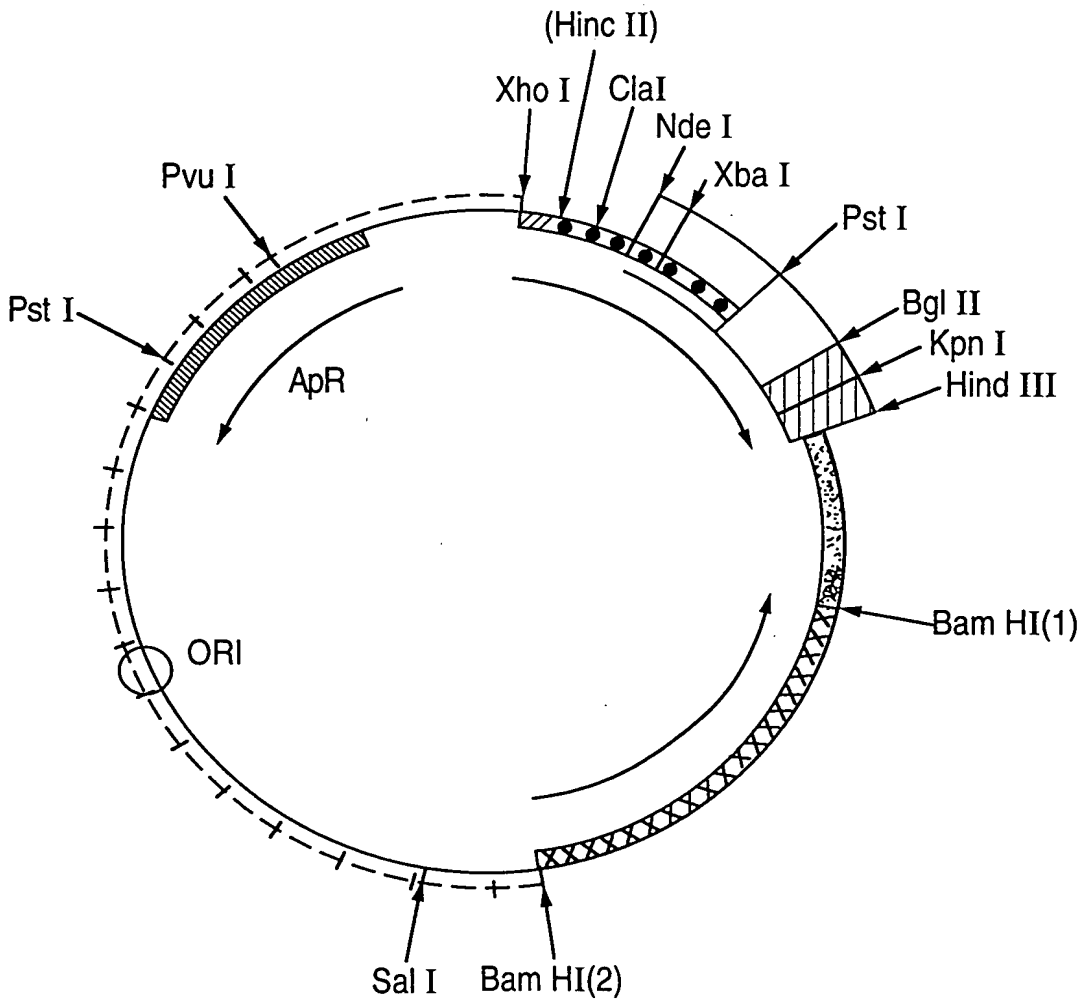

(Hinc II)
Xho I
ClaI
Nde I
Xba I
Pst I
Pvu I
Pst I
Bgl II
Kpn I
Hind III
ApR
ORI
Bam HI(1)
Sal I
Bam HI(2)

FIG. 9

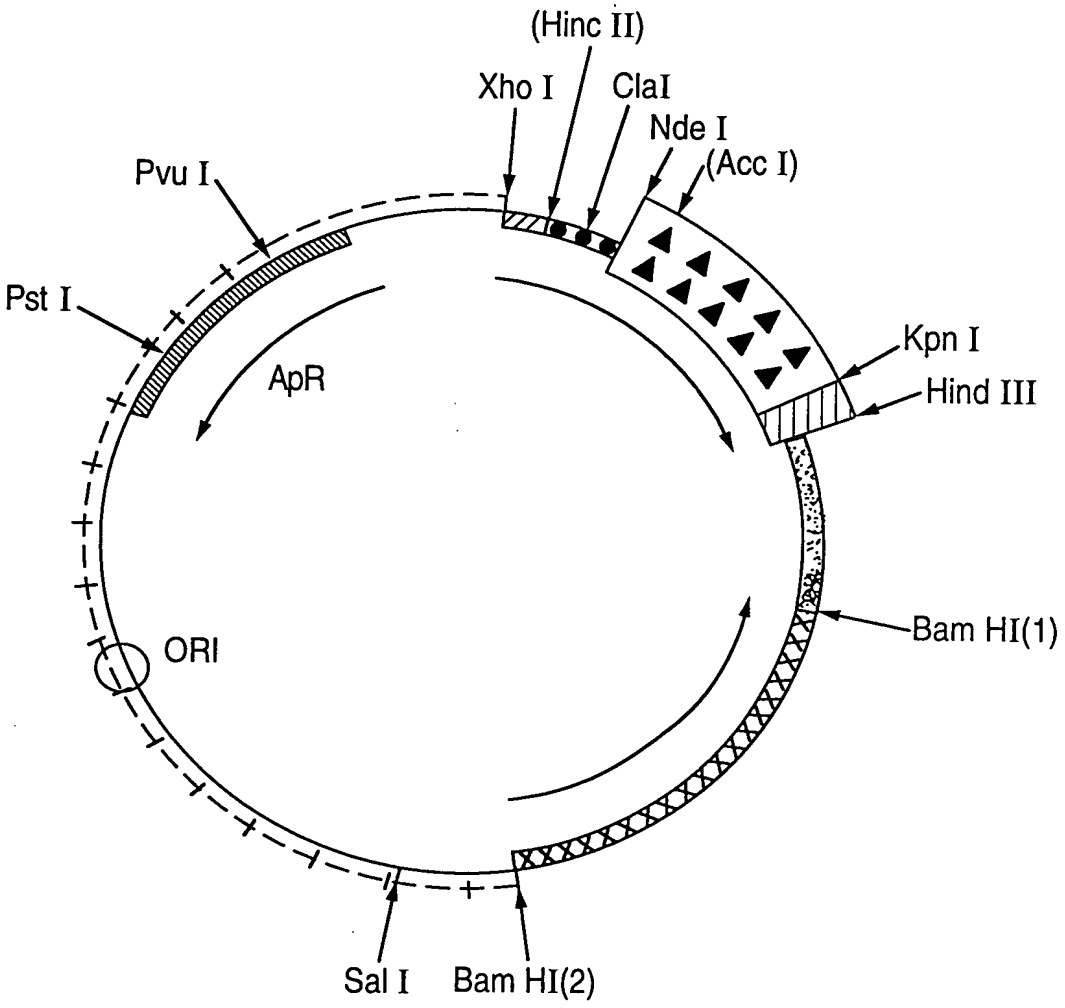


FIG. 10

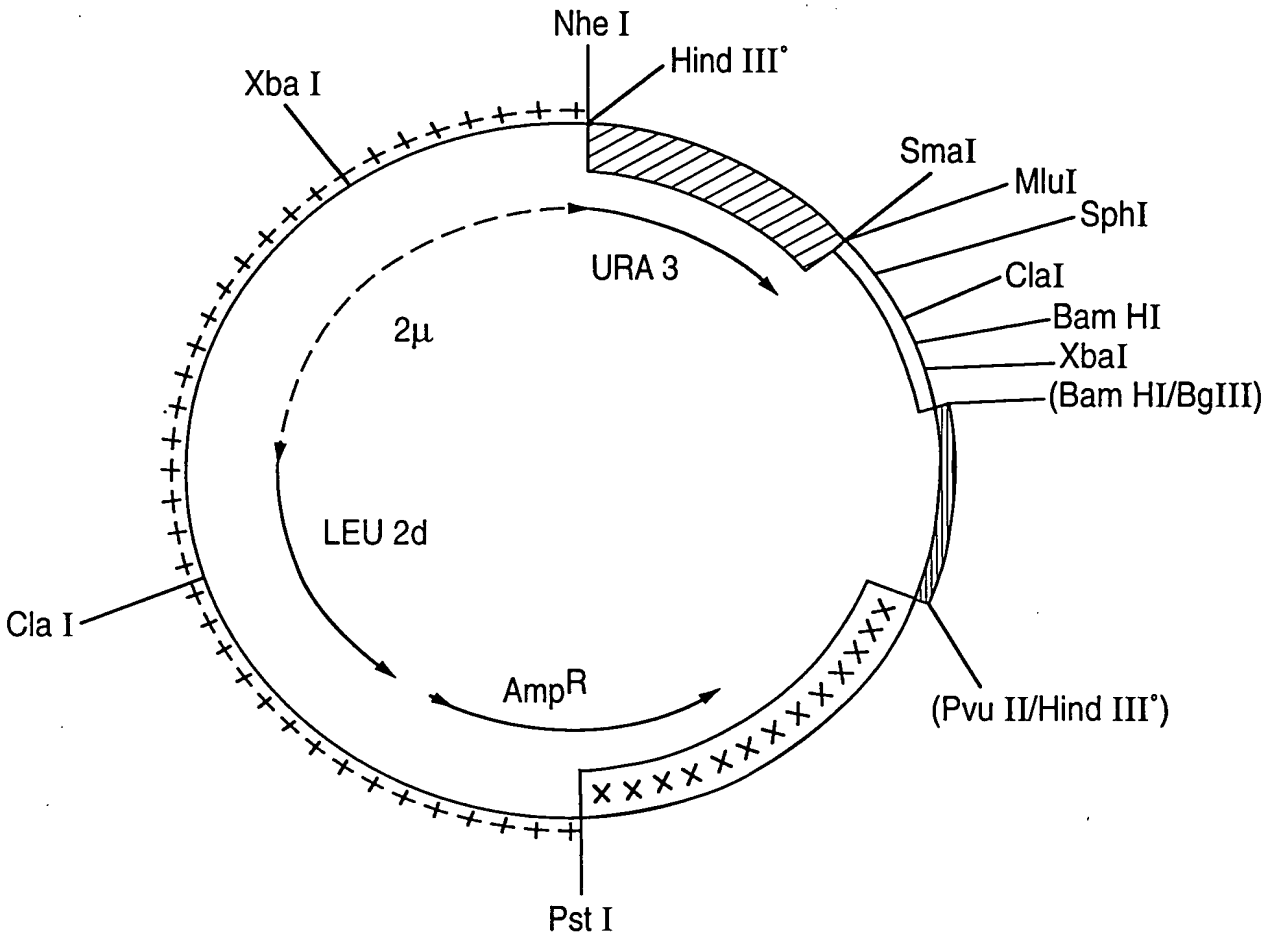

Nhe I
Hind III°
Xba I
SmaI
MluI
SphI
ClaI
Bam HI
XbaI
(Bam HI/BgIII)
URA 3
2μ
LEU 2d
Cla I
AmpR
(Pvu II/Hind III°)
Pst I

FIG. 11

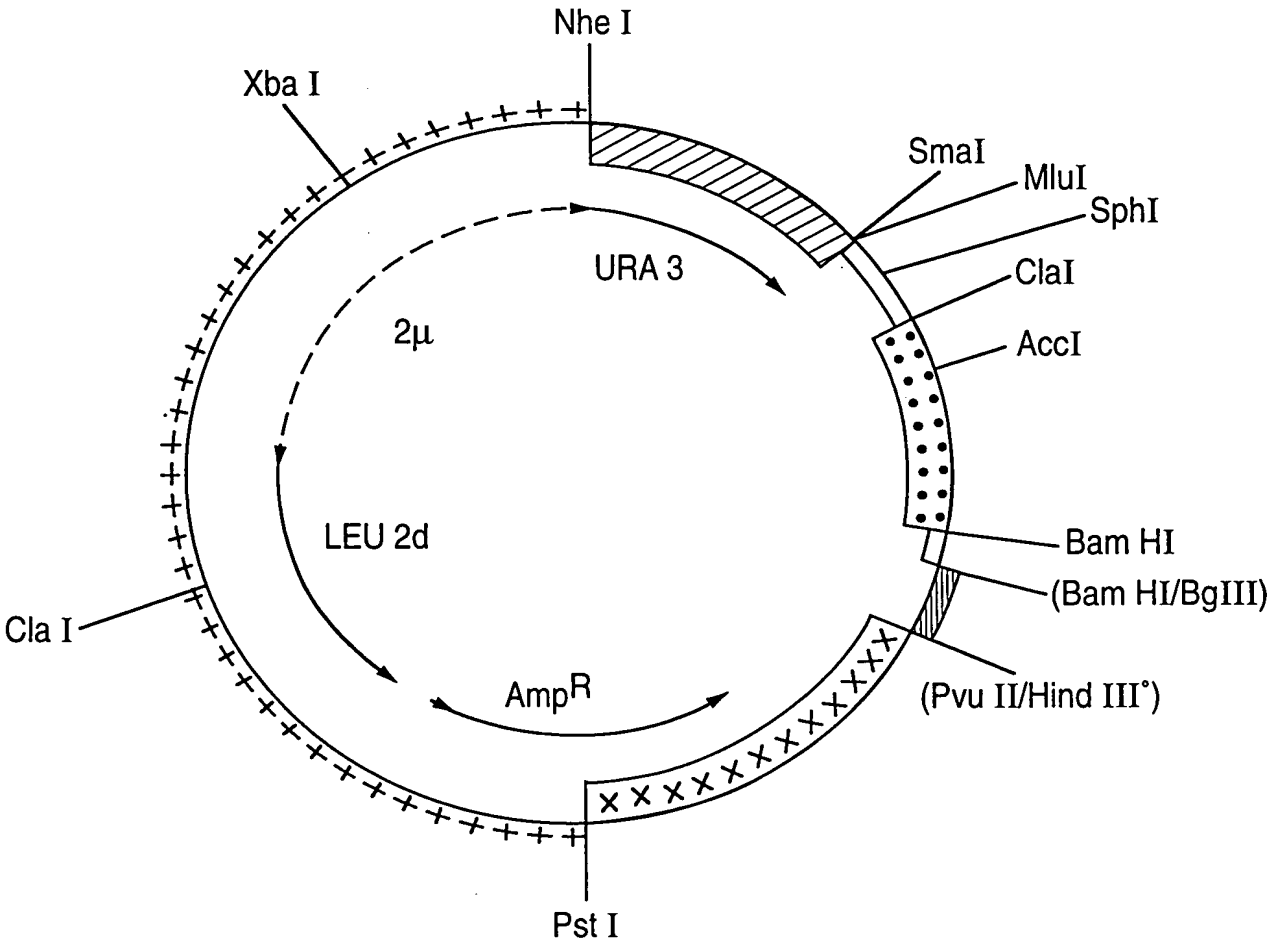


FIG. 12

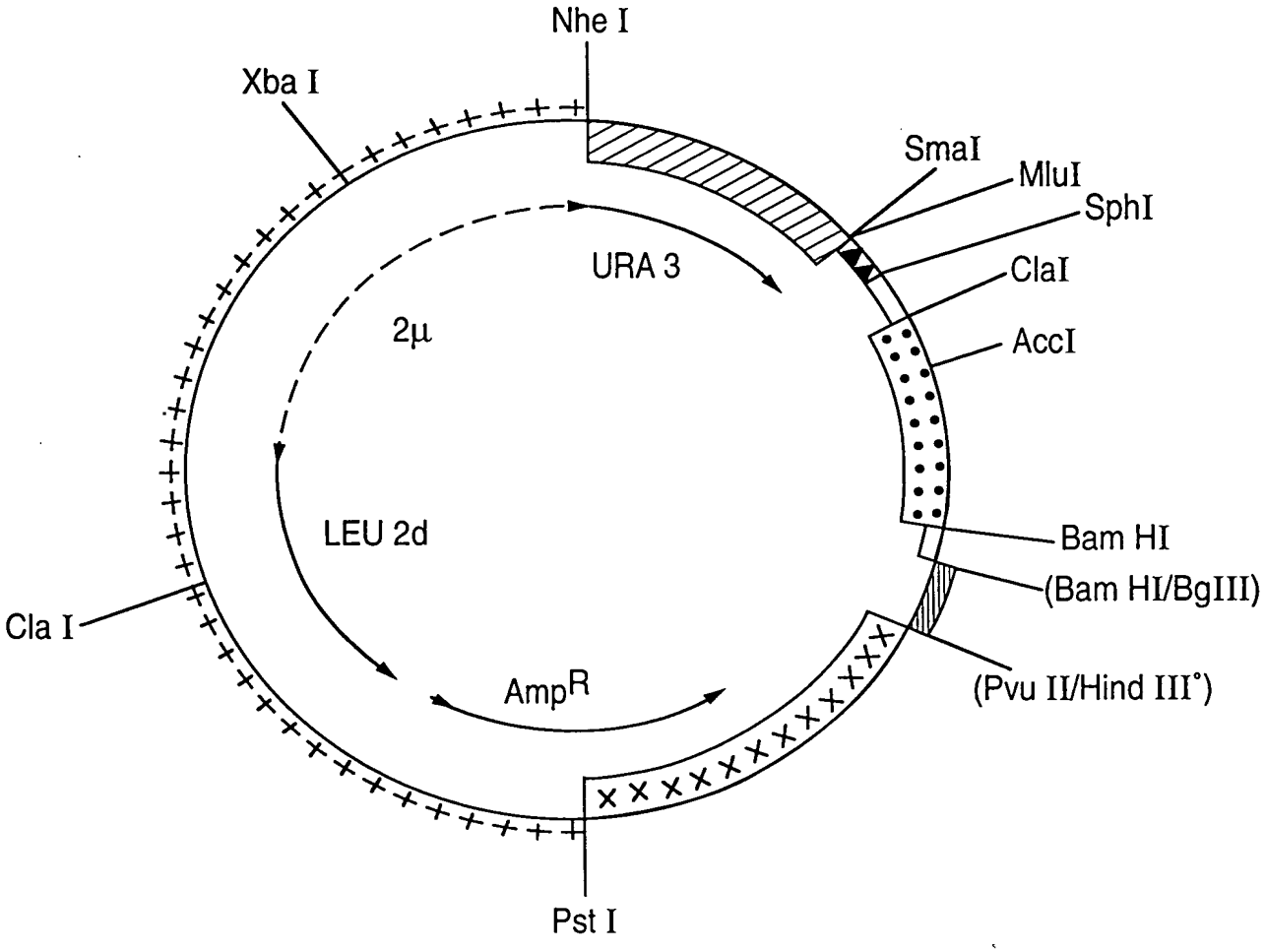


FIG. 13

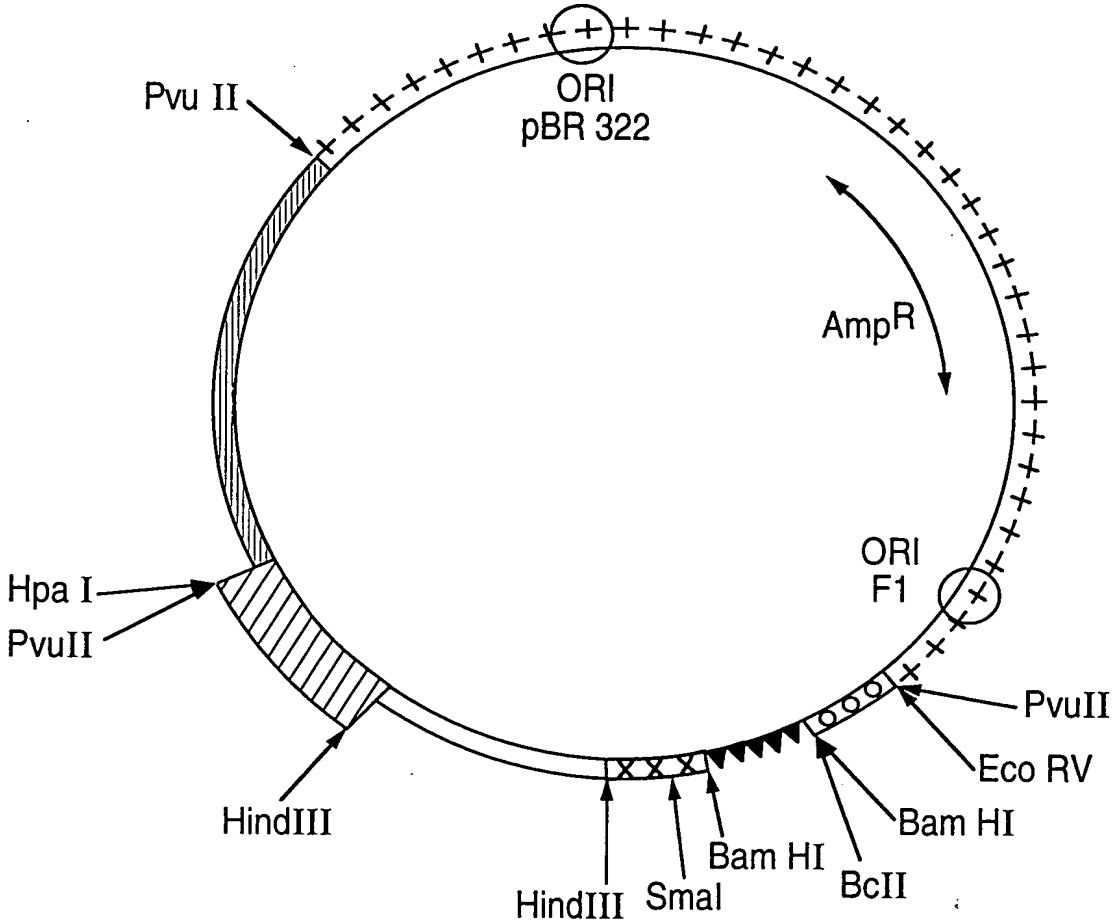


FIG. 14